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FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. NM-03845
1b. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Attn: Dwane Oliver Devon Energy Production Company, L.P.		7. If Unit or CA Agreement, Name and No. NORTHEAST BLANCO UNIT
3a. Address PO Box 6459 Navajo Dam NM, 87419		8. Lease Name and Well No. NEBU 433A
3b. Phone No. (include area code) 505-632-0244		9. API Well No. 3004531440
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface 1345' FNL & 1560' FEL SW NE Unit G At bottom hole 1000' FNL & 1345' FWL NE NW Unit C At proposed prod. zone Same 940		10. Field and Pool, or Exploratory Fruitland Coal
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approximately 31 miles northeast of Aztec NM		11. Sec., T., R., M., or Blk. And Survey or Area SL Sec. 24 T 30N R 8W BHL SEC 19 T 30N R 7W
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg unit line, if any) 1000'	16. No. of Acres in lease 307	17. Spacing Unit dedicated to this well 307.44 R-8813
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 2630'	20. BLM/ BIA Bond No. on file CO-1104
21. Elevations (Show whether DF, RT, GR, etc.) 6365' GL	22. Approximate date work will start* Upon Approval	23. Estimated Duration 20 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by existing bond on file(see item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/ or plans as may be required by the authorized officer. |

25. Signature <i>Dwane Oliver</i>	Name (Printed/ Typed) Dwane Oliver	Date 10-22-03
Title Sr. Operations Technician		
Approved By (Signature) /s/ David J. Mankiewicz	Name (Printed/ Typed)	Date JAN - 6 2004
Title Office		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* (Instructions on reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 316.3 and appeal pursuant to 43 CFR 316.4

HPA
NMOC

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

HOLD C104 FOR Directional Survey

District I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artesia, NM 87211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 71629	³ Property Name Bgsin Fractured Coal
⁴ Property Code 19641	⁵ Property Name NEBU	⁶ Well Number # 433A
⁷ OGRID No. 6137	⁸ Operator Name Devon Energy Production Company, L.P.	⁹ Elevation 6365

¹⁰ Surface Location

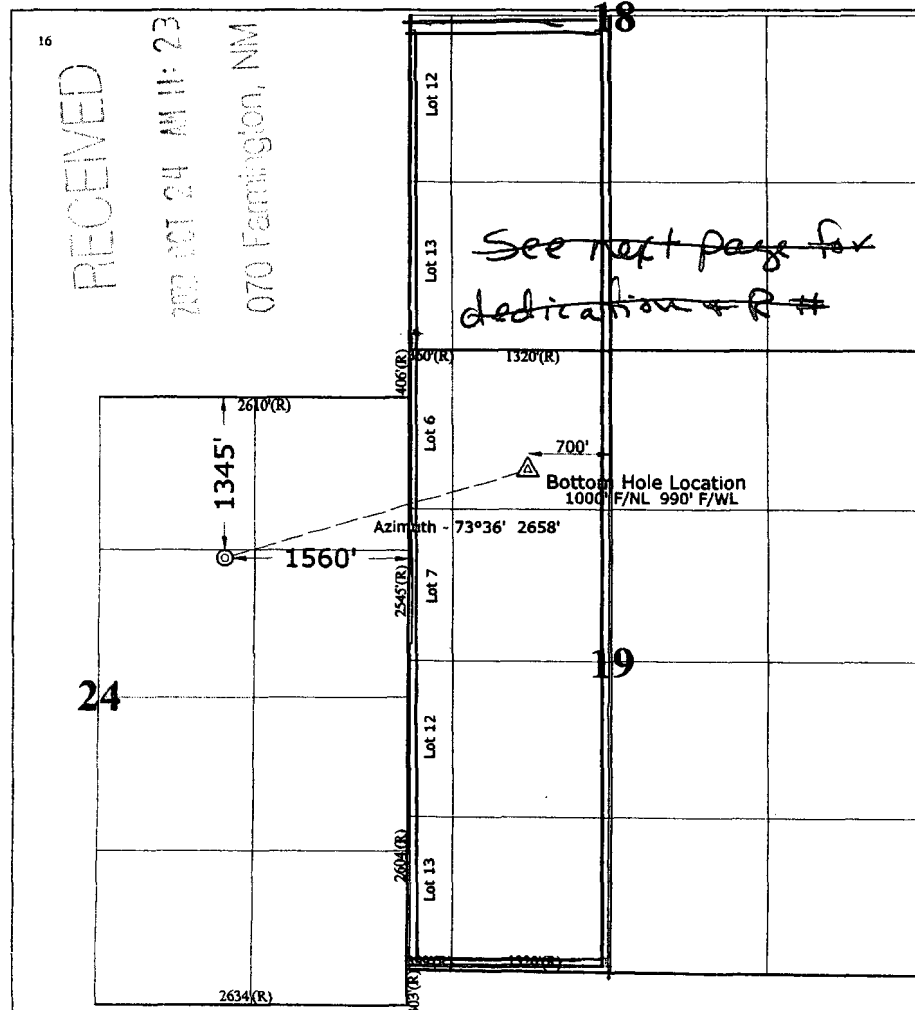
UL or Lot No. G	Section 24	Township 30 N	Range 8 W	Lot Idn	Feet from the 1345	North/South line NORTH	Feet from the 1560	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

⁷ UL or lot no. C	Section 19	Township 30 N	Range 7 W	Lot Idn	Feet from the 1000	North/South line NORTH	Feet from the 990	East/West line WEST	County SAN JUAN
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¹² Dedicated Acres #67307.44	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-8813
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature <i>Dwaine Oliver</i>
Printed Name Dwaine Oliver
Title Sr. Operating Tech
Date 10-22-03

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Revised: September 29, 2003
December 5, 2002
Date of Survey
Signature and Seal of Professional Surveyor

GARY D. VANN NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7016
7016 Certificate Number

NEBU 433A
Unit G 24-30N-8W
San Juan Co., NM

DRILLING PLAN

No notification necessary / phone call / 1-20-04.

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS & ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Formation	TMD (ft)	TVD (ft)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	Surface	
Ojo Alamo	4198	2125	Aquifer
Kirtland	4379	2305	
Fruitland	4809	2735	Gas
Pictured Cliffs	5314	3240	Gas
TD	5314	3240	

All shows of fresh water and minerals will be adequately protected and reported.

2. PRESSURE CONTROL EQUIPMENT:

All well control equipment shall be in accordance with Onshore Order #2 for 2M systems.

The minimum specifications for pressure control equipment that will be provided are included on the attached schematic diagram which shows the size and pressure ratings.

2000# BOP With Pipe Rams
2000# BOP With Blind Rams

The anticipated bottom hole pressure is 300 psi.

Auxiliary equipment to be used:

- Upper kelly cock with handle available.

The manifold includes appropriate valves and adjustable chokes. The kill line will have one check valve. Ram type preventers will be pressure tested to full working pressure (utilizing a test plug) or 70% of the internal yield pressure (without a test plug) at:

- Initial installation
- Whenever any seal subject to test pressure is broken
- Following related repairs+
- At 30 day intervals

Pipe and blind rams shall be activated each trip.

A BOPE pit level drill will be conducted weekly for each drilling crew.

All tests and drills will be recorded in the drilling log.

The accumulator will have sufficient capacity to close all rams and retain 200 psi above pre-charge pressure without the use of closing unit pumps.

Master controls will be at the accumulator.

3. CASING & CEMENTING PROGRAM:

A. The proposed casing program will be as follows:

TMD	TVD	Hole Size	Size	Grade	Weight	Thread	Condition
0-250'	0-250'	12-1/4"	9-5/8"	H-40	32#	STC	New
0-4809'	0-2735'	8-3/4"	7"	K-55	23#	LTC	New
4759'-TD	2685'-TD	6-1/4"	5-1/2"	K-55	15.5 #	LTC	New

All casing strings below the conductor shall be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% minimum internal yield.

Surface: The bottom three joints of the surface casing will have a minimum of one centralizer per joint and one centralizer every joint thereafter (Total 5 centralizers estimated)

7" Casing: The bottom three joints of the 7" casing will have a minimum of one centralizer per joint and one centralizer every fifth joint thereafter to above Ojo Alamo with one turbolizer below and throughout the Ojo Alamo. (Total 12 centralizers, 3 turbolizers estimated).

B. The proposed casing and cementing program will be as follows:

Surface String: 9-5/8" Surface cemented in a 12-1/4" hole at 250'.
32.3# H-40 ST&C 8 Rnd
Saw tooth guide shoe
Cemented with 200 sacks Class B mixed at 15.6 ppg w/.25 pps
celloflake, 2% calcium chloride. Yield 1.19 ft³/sx, cement
designed to circulate to surface.

Production String: 7" Intermediate cemented in an 8-3/4" hole.
23# J-55 LT&C 8 Rnd
Float Collar
Joint
Float Shoe *650 per Duane Oliver 12/19/03*
Cement with ~~450~~ sacks Class B 50/50 POZ, 3% gel, 5# gilsonite,
1/4"# Flocele, .1% CFR 3, .2% Halad 344, yield 1.47 ft³/sx.
Cement designed to circulate to surface.
Pending hole conditions cement baskets may be installed above
TD.

Liner: 5-1/2" Liner
15.5# J-55 LT&C 8 Rnd
Shoe
Not cemented

Actual volumes will be calculated and adjusted with caliper log prior to cementing.

4. DRILLING FLUIDS PROGRAM:

TMD	TVD	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-250'	0-250'	Spud	8.4-9.0	29-70	8.0	NC	FW gel
250'-4809'	250-2735'	LSND	8.4-9.0	29-70	8.0	10-12	LCM as needed
4809'-TD	2735-TD	Air					Foam as needed

NC = no control

Sufficient quantities of mud material will be maintained on site or be readily accessible for the purpose of assuring well control. Slow pump rates will be recorded on daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.

5. EVALUATION PROGRAM:

Wire Line Logs: None

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Devon SFS Operating Inc.
New Mexico
San Juan County

2003 JAN 10 AM 11:25

Proposal Report for Northeast Blanco Unit 433A

070 Farmington, NM

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
350.00	0.000	0.000	350.00	0.00 N	0.00 E	0.00	0.000
360.00	1.000	75.647	360.00	0.02 N	0.08 E	0.09	10.000
380.00	3.000	75.647	379.99	0.19 N	0.76 E	0.79	10.000
400.00	5.000	75.647	399.94	0.54 N	2.11 E	2.18	10.000
420.00	7.000	75.647	419.83	1.06 N	4.14 E	4.27	10.000
440.00	9.000	75.647	439.63	1.75 N	6.83 E	7.05	10.000
460.00	11.000	75.647	459.33	2.61 N	10.20 E	10.53	10.000
480.00	13.000	75.647	478.89	3.64 N	14.23 E	14.68	10.000
500.00	15.000	75.647	498.29	4.84 N	18.91 E	19.52	10.000
520.00	17.000	75.647	517.52	6.21 N	24.25 E	25.04	10.000
540.00	19.000	75.647	536.54	7.74 N	30.24 E	31.22	10.000
560.00	21.000	75.647	555.33	9.43 N	36.87 E	38.06	10.000
580.00	23.000	75.647	573.87	11.29 N	44.13 E	45.55	10.000
600.00	25.000	75.647	592.14	13.31 N	52.01 E	53.68	10.000
620.00	27.000	75.647	610.12	15.48 N	60.50 E	62.45	10.000
640.00	29.000	75.647	627.78	17.81 N	69.60 E	71.84	10.000
660.00	31.000	75.647	645.10	20.29 N	79.28 E	81.84	10.000
680.00	33.000	75.647	662.06	22.91 N	89.55 E	92.43	10.000
700.00	35.000	75.647	678.64	25.69 N	100.38 E	103.62	10.000
720.00	37.000	75.647	694.81	28.60 N	111.77 E	115.37	10.000
740.00	39.000	75.647	710.57	31.65 N	123.70 E	127.69	10.000
760.00	41.000	75.647	725.89	34.84 N	136.15 E	140.54	10.000
780.00	43.000	75.647	740.76	38.16 N	149.12 E	153.92	10.000
800.00	45.000	75.647	755.14	41.60 N	162.58 E	167.82	10.000
820.00	47.000	75.647	769.03	45.17 N	176.51 E	182.20	10.000
840.00	49.000	75.647	782.42	48.85 N	190.91 E	197.06	10.000
860.00	51.000	75.647	795.27	52.65 N	205.75 E	212.38	10.000
880.00	53.000	75.647	807.58	56.55 N	221.02 E	228.14	10.000
900.00	55.000	75.647	819.34	60.57 N	236.70 E	244.32	10.000
920.00	57.000	75.647	830.52	64.68 N	252.76 E	260.90	10.000
940.00	59.000	75.647	841.12	68.88 N	269.19 E	277.86	10.000
960.00	61.000	75.647	851.12	73.17 N	285.97 E	295.18	10.000
980.00	63.000	75.647	860.51	77.55 N	303.08 E	312.84	10.000
1000.00	65.000	75.647	869.28	82.01 N	320.49 E	330.82	10.000
1020.00	67.000	75.647	877.41	86.54 N	338.19 E	349.09	10.000
1040.00	69.000	75.647	884.90	91.13 N	356.15 E	367.63	10.000
1060.00	71.000	75.647	891.74	95.79 N	374.36 E	386.42	10.000
1080.00	73.000	75.647	897.92	100.51 N	392.79 E	405.44	10.000
1100.00	75.000	75.647	903.43	105.27 N	411.41 E	424.67	10.000
1120.00	77.000	75.647	908.27	110.08 N	430.21 E	444.07	10.000
1133.77	78.377	75.647	911.21	113.42 N	443.25 E	457.53	10.000
2000.00	78.377	75.647	1085.73	323.74 N	1265.23 E	1305.99	0.000
2986.48	78.377	75.647	1284.47	563.27 N	2201.32 E	2272.25	0.000
3000.00	77.566	75.647	1287.29	566.55 N	2214.13 E	2285.47	6.000

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Proposal Report for Northeast Blanco Unit 433A

070 Farmington, NM

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
3100.00	71.566	75.647	1313.89	590.43 N	2307.48 E	2381.82	6.000
3200.00	65.566	75.647	1350.41	613.49 N	2397.61 E	2474.86	6.000
3300.00	59.566	75.647	1396.46	635.49 N	2483.56 E	2563.57	6.000
3400.00	53.566	75.647	1451.53	656.16 N	2564.37 E	2646.99	6.000
3500.00	47.566	75.647	1515.02	675.30 N	2639.16 E	2724.19	6.000
3600.00	41.566	75.647	1586.24	692.69 N	2707.11 E	2794.33	6.000
3700.00	35.566	75.647	1664.39	708.14 N	2767.48 E	2856.64	6.000
3800.00	29.566	75.647	1748.63	721.47 N	2819.60 E	2910.44	6.000
3900.00	23.566	75.647	1838.03	732.55 N	2862.91 E	2955.15	6.000
4000.00	17.566	75.647	1931.61	741.26 N	2896.93 E	2990.26	6.000
4100.00	11.566	75.647	2028.35	747.49 N	2921.28 E	3015.40	6.000
4192.77	6.000	75.647	2120.00	751.00 N	2935.00 E	3029.56	6.000
4200.00	5.915	75.647	2127.19	751.19 N	2935.73 E	3030.31	1.174
4300.00	4.741	75.647	2226.76	753.49 N	2944.72 E	3039.59	1.174
4400.00	3.566	75.647	2326.49	755.28 N	2951.74 E	3046.84	1.174
4500.00	2.392	75.647	2426.36	756.57 N	2956.77 E	3052.03	1.174
4600.00	1.218	75.647	2526.30	757.35 N	2959.83 E	3055.18	1.174
4700.00	0.043	75.647	2626.30	757.63 N	2960.89 E	3056.29	1.174
4703.70	0.000	0.000	2630.00	757.63 N	2960.89 E	3056.29	1.174

All data is in Feet (US Survey) unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to Well. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet (US Survey).
Vertical Section is from Well and calculated along an Azimuth of 75.647° (True).

Based upon Minimum Curvature type calculations, at a Measured Depth of 4703.70ft.,
The Bottom Hole Displacement is 3056.29ft., in the Direction of 75.647° (True).

Comments

Measured Depth (ft)	TVD (ft)	Station Coordinates Northings (ft)	Eastings (ft)	Comment
0.00	0.00	0.00 N	0.00 E	Surface Location: 1345 FNL & 1560 FEL, Sec. 24-T30N-R8W
350.00	350.00	0.00 N	0.00 E	Kick-Off at 350.00ft
741.89	712.04	31.95 N	124.85 E	Build Rate = 10.000°/100ft
1133.77	911.21	113.42 N	443.25 E	End of Build at 1133.77ft
2060.13	1097.84	338.34 N	1322.29 E	Hold Angle at 78.377°
2986.48	1284.47	563.27 N	2201.32 E	Start Drop at 2986.48ft
3589.63	1578.51	690.97 N	2700.40 E	Drop Rate = 6.000°/100ft
4192.77	2120.00	751.00 N	2935.00 E	Start Drop to Vertical at 4192.77ft
4448.24	2374.65	755.97 N	2954.42 E	Drop Rate = 1.174°/100ft
4703.70	2630.00	757.63 N	2960.89 E	Total Depth at 4703.70ft

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Proposal Report for Northeast Blanco Unit 433A

070 Farmington, NM

Formation Tops

Formation Plane (Below Well Origin)			Profile		Penetration Point			Formation Name
Sub-Sea (ft)	Dip Angle	Dn-Dip Dirn.	Measured Depth (ft)	Vertical Depth (ft)	Sub-Sea Depth (ft)	Northings (ft)	Eastings (ft)	
-4170.00	0.000	180.126	3578.07	1570.00	-4170.00	689.04 N	2692.84 E	Ojo Alamo
-4070.00	0.000	180.126	3706.88	1670.00	-4070.00	709.12 N	2771.34 E	Kirtland
-3620.00	0.000	180.126	4192.77	2120.00	-3620.00	751.00 N	2935.00 E	Fruitland
-3110.00	0.000	180.126	4703.70	2630.00	-3110.00	757.63 N	2960.89 E	Pictured Cliff

Casing details

From		To		Casing Detail
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	
<Surface>	<Surface>	300.00	300.00	9 5/8in Casing

Targets associated with this wellpath

Target Name	Target Entry Coordinates			Target Shape	Target Type
	TVD (ft)	Northings (ft)	Eastings (ft)		
NEBU 433A BHL	2120.00	751.00 N	2935.00 E	Circle	Current Target

Surface location:

$$1345' \text{ FNL} + 404' - 757.43' = \boxed{993.37' \text{ FNL}}$$

$$90^\circ - 73.36^\circ = 16.64^\circ$$

$$\cos(16.64^\circ) = 0.958$$

$$0.958 \cdot 2658' = 2546.69$$

$$2546.69' - 1920' = \boxed{986.7' \text{ FNL}}$$